**How Big is a Whale?**

**Objectives:**

**Students will…**

* use the Internet to make comparisons regarding the sizes of whales
* investigate the differences in length, weight, area, volume, and speed.
* convert between imperial and metric units if you want to this part.
* invent a method to measure the volume of a whale
* use information from the Internet to calculate the time it takes for Southern Right whales to migrate along he Australian coast line and where they actually spend time.

**Materials Needed:**

* Computer with Internet access
* Rope or string
* Centimetre grid paper
* Calculator
* Tape measure

**Web Sites:**

[**http://kids.nationalgeographic.com/kids/animals/creaturefeature/orca/**](http://kids.nationalgeographic.com/kids/animals/creaturefeature/orca/)

[**http://www.abc.net.au/oceans/whale/spot.htm**](http://www.abc.net.au/oceans/whale/spot.htm)

[**http://www.whale-images.com/info/humpback-whale-facts.htm**](http://www.whale-images.com/info/humpback-whale-facts.htm)

A google search will find many other sites with interesting information.

**Teaching the Lesson:**

* You may choose to show a short video or provide some information about whales before introducing the lesson.
* Reinforce the idea of making a comparison to a known object to help in making an estimation of very large objects.
* There are numerous Web sites dealing with whales. You may wish to explore alternative sites.
* If there are enough students in the class, you can go outside and have them stand fingertip to fingertip to demonstrate the arm span calculation.
* For the arm span exercise, break students into groups of four or five.
* Since whale "heights" are not given, you may need to give additional guidance in transferring the scale drawings to the centimeter grid paper.
* Prior to the lesson, introduce a method to find the volume of an irregularly shaped object.
* Review concepts of area and volume.